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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,078	03/01/2002	Masatoshi Yokota	0754-0173P	9128

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

BUTTNER, DAVID J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 04/16/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/085,078

Applicant(s)

YOKOTA, MASATOSHI

Examiner

David Buttner

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Wu '002 Patent.

Wu produces urethane covered golf balls. The urethane is formed from a polyol/polyisocyanate prepolymer and a curing agent (abstract). The polyol should have a MW of 600-4000 (col. 6, line 8) and can be a polycarbonate polyol (col. 5, line 43). Wu lists the same curing agents (col. 4, lines 43-61). The hardness of the exemplified polyurethanes is 52 and 54 Shore D (table 2). The free –NCO content and equivalent ratio of table 1 corresponds to applicant's claims.

Claims 1-6 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Cavallaro '491 Publication.

Cavallaro produces urethane covered golf balls. The urethane is formed from a polyol/polyisocyanate prepolymer and curing agent (paragraph 65). The polyol may be poly(hexamethylene carbonate)glycol of 200-4000 MW (paragraph 61). Cavallaro lists the same curing agents (paragraph 63) or applicant. The examples (table 1) exhibit the same free -NCO content and equivalent ratio as applicant desires. The urethane cover has a Shore D under 45 (abstract).

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Cavallaro '491 Publication in view of Murai '691.

Cavallaro lists a number of polyols including poly(hexamethylene carbonate)glycol, but does not point out the advantages thereof.

Murai's background (col. 1, lines 32-39, 54-60) teaches the advantages of using such a polycarbonate diol instead of polyether or polyester diols. It would have been obvious to select poly(hexamethylene carbonate)glycol from Cavallaro's list for the expected advantages.

Claims 1-3, 4 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the Kakiuchi '286 Patent.

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Kakiuchi produces urethane covered golf balls. The urethane cover has a Shore D of 45-55 (col. 4, line 2). The urethane can be based hexanediol carbonate glycol (col. 3, lines 37) of 1000-3000 MW (col. 3, line 40). This high MW polyol is reacted with diisocyanate and chain extender (col. 3, lines 41-53). The chain extenders correspond to applicant's curing agent.

Kakiuchi does not indicate the high MW polyol and diisocyanate are pre-reacted, but there is no reason to believe the final product is any different from applicant's final product (MPEP 2113).

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Kakiuchi '286 Patent in view of Peter '313.

Kakiuchi does not teach pre-reacting his high MW polyol with diisocyanate.

Peter teaches the prepolymer method as an alternative to concurrent reaction (col. 7, lines 40-53). It would have been obvious to use either method and result in substantially the same final product.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 703-308-2403. The examiner can normally be reached on Weekdays from 10:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Dawson can be reached on 703-308-2340. The fax phone numbers for the organization where this application or proceeding is

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assigned are 703-872-9310 for regular communications and 703-872-9311 for
After Final communications.

Any inquiry of a general nature or relating to the status of this application
or proceeding should be directed to the receptionist whose telephone number is
703-308-0661.

DAVID J. BUTTNER
PRIMARY EXAMINER

D. Buttner/mn
April 15, 2003

A handwritten signature in cursive script that reads "David Buttner".